IN THE CLAIMS:

Claims 1, 12-16, 22, 35, 37-39, 41-44, 50, 53 and 54 are amended herein. Claims 4, 21, 25, 36 and 52 are cancelled. New claims 55-58 are added. All pending claims are produced below. In addition, the status of each is also indicated below and

1. (Currently amended) A routing method, comprising:

receiving a set of information associated with a particular flow;

accessing a flow data structure associated with said particular flow, said flow data structure comprising an indication of a specific route that sets of information associated with said particular flow should traverse to arrive at a particular egress; ~~and~~

sending said set of information to said particular egress via said specific route[.]; receiving a second set of information which is also associated with said particular flow; accessing said flow data structure to obtain said indication of said specific route; and sending said second set of information to said particular egress via said specific route.

2. (Original) The method of claim 1, wherein said specific route represents a complete path to said particular egress.

3. (Original) The method of claim 1, wherein said flow data structure is not associated with any other flow.

4. (Cancelled)

5. (Original) The method of claim 1, wherein said indication comprises a reference to a routing table.

6. (Original) The method of claim 1, wherein said flow data structure further comprises an identifier for said particular egress.

7. (Original) The method of claim 1, wherein said flow data structure further comprises an indication of an alternate route that sets of information associated with said particular flow may traverse to arrive at an alternate egress.

8. (Original) The method of claim 7, where said flow data structure further comprises an identifier for said alternate egress.

9. (Original) The method of claim 1, wherein said set of information comprises an information packet.

10. (Original) The method of claim 9, wherein said information packet is an internet protocol (IP) packet.

11. (Original) The method of claim 10, wherein said particular flow comprises a plurality of information packets.

12. (Currently amended) A routing method, comprising:

maintaining a plurality of flow data structures, each flow data structure associated with a corresponding flow, said each flow data structure comprising an indication of a specific route that sets of information associated with a corresponding flow should traverse to arrive at an egress, and further comprising:

receiving a set of information associated with a new flow, said new flow destined for a particular egress,

determining a least utilized route to said particular egress, and

storing an indication of said least utilized route in a new flow data structure associated with said new flow to cause future sets of information associated with said new flow to be sent to said particular egress via said least utilized route; and

using said plurality of flow data structures to route sets of information through a router.

13. (Currently amended) The method of claim 12, wherein said each flow data structure further comprises an identifier for a particular egress.

14. (Currently amended) The method of claim 12, wherein said each flow data structure further comprises an indication of an alternate route that sets of information associated with a corresponding flow may traverse to arrive at an alternate egress.

15. (Currently amended) The method of claim 14, wherein said each flow data structure further comprises an identifier for said alternate egress.

16. (Currently amended) The method of claim 12, wherein said each flow data structure further comprises quality of service (QoS) parameters for a corresponding flow.

17. (Original) The method of claim 12, wherein said indication comprises a reference to a routing table.

18. (Original) The method of claim 12, wherein at least one of said corresponding flows comprises a plurality of sets of information.

19. (Original) The method of claim 18, wherein each set of information comprises an information packet.

20. (Original) The method of claim 19, wherein said information packet is an internet protocol (IP) packet.

21. (Cancelled)

22. (Currently amended) A routing method implemented within a router, comprising:

receiving, at an ingress of a router, a set of information associated with a particular flow;

accessing a flow data structure associated with said particular flow, said flow data structure comprising an indication of a specific route through the router that sets of information associated with said particular flow should traverse to arrive at a particular egress; ~~and~~

sending said set of information to said particular egress via said specific route[.];

receiving a second set of information which is also associated with said particular flow;

accessing said flow data structure to obtain said indication of said specific route; and

sending said second set of information to said particular egress via said specific route.

23. (Original) The method of claim 22, wherein said flow data structure is not associated with any other flow.

24. (Original) The method of claim 22, wherein said specific route represents a complete path between said ingress and said particular egress through a switching fabric in the router.

25. (Cancelled)

26. (Original) The method of claim 22, wherein said indication comprises a reference to a routing table.

27. (Original) The method of claim 22, wherein said particular flow comprises a plurality of sets of information.

28. (Original) The method of claim 27, wherein each set of information comprises an information packet.

29. (Original) The method of claim 28, wherein said information packet is an internet protocol (IP) packet.

30. (Original) A routing method, comprising:

receiving a first set of information associated with a first flow;

accessing a first flow data structure associated with said first flow, said first flow data structure comprising an indication of a first specific route that sets of information associated with said first flow should traverse to arrive at a first particular egress;

sending said first set of information to said first particular egress via said first specific route;

receiving a second set of information associated with a second flow;

accessing a second flow data structure associated with said second flow, said second flow data structure comprising an indication of a second specific route that sets of information associated with said second particular flow should traverse to arrive at a second particular egress; and

sending said second set of information to said second particular egress via said second specific route;

wherein said first flow data structure and said second flow data structure are distinct.

31. (Original) The method of claim 30, wherein said first specific route and said second specific route may be the same route.

32. (Original) The method of claim 30, wherein said first specific route and said second specific route are different routes.

33. (Original) The method of claim 30, wherein said first particular egress and said second particular egress may be the same egress.

34. (Original) The method of claim 30, wherein said first particular egress and said second particular point are different egresses.

35. (Currently amended) An apparatus, comprising:

a storage for storing a plurality of flow data structures, each flow data structure associated with a corresponding flow, said each flow data structure comprising an indication of a specific route that sets of information associated with a corresponding flow should traverse to arrive at an egress; and

a flow manager coupled to said storage, said flow manager maintaining said plurality of flow data structures, and using said flow data structures to route sets of information through a router, wherein said flow manager, upon receiving a set of information associated with a particular flow, accesses from said storage a particular flow data structure that is associated with said particular flow, and obtains therefrom an indication of a particular specific route that sets of information associated with said particular flow should traverse to arrive at a particular egress, said flow manager sending said set of information to said particular egress via said particular specific route.

36. (Cancelled)

37. (Currently amended) The apparatus of claim ~~36~~ 35, wherein said particular specific route represents a complete path to said particular egress.

38. (Currently amended) The apparatus of claim ~~36~~ 35, wherein said flow manager sends said set of information to said particular egress by augmenting said set of information to include said particular specific route, and sending the augmented set of information into a switching core to be routed to said particular egress via said particular specific route.

39. (Currently amended) The apparatus of claim ~~36~~ 35, wherein said flow manager receives a second set of information associated with said particular flow, and accesses from said storage said particular flow data structure associated with said particular flow to obtain therefrom the indication of said particular specific route, said flow manager sending said second set of information to said particular egress via said particular specific route.

40. (Original) The apparatus of claim 35, wherein said storage further stores a routing table, and wherein said indication comprises a reference to said routing table.

41. (Currently amended) The apparatus of claim 35, wherein said each flow data structure further comprises an identifier for a particular egress.

42. (Currently amended) The apparatus of claim 35, wherein said each flow data structure further comprises an indication of an alternate route that sets of information associated with a corresponding flow may traverse arrive at an alternate egress.

43. (Currently amended) The apparatus of claim 42, wherein said each flow data structure further comprises an identifier for said alternate egress.

44. (Currently amended) The apparatus of claim 35, wherein said each flow data structure further comprises quality of service (QoS) parameters for a corresponding flow.

45. (Original) The apparatus of claim 35, wherein at least one of said corresponding flows comprises a plurality of sets of information.

46. (Original) The apparatus of claim 45, wherein each set of information comprises an information packet.

47. (Original) The apparatus of claim 46, wherein said information packet is an internet protocol (IP) packet.

48. (Original) The apparatus of claim 35, wherein said flow manager:

receives a set of information associated with a new flow, said new flow destined for a particular egress, said flow manager determining a least utilized route to said particular egress, and storing an indication of said least utilized route in a new flow data structure associated with said new flow in said storage, said new flow data structure causing future sets of information associated with said new flow to be sent to said particular egress via said least utilized route.

49. (Original) The apparatus of claim 35, wherein said apparatus is implemented in an ingress linecard of a router.

50. (Currently amended) A router, comprising:

an ingress device;

a first egress device; and

a switching core interconnecting said ingress device with said first egress device to provide a plurality of possible routes between said ingress device and said first egress device[;],

wherein said ingress device receives a first set of information associated with a first flow, and accesses a first flow data structure associated with said first flow, said first flow data structure comprising an indication of a first specific route through said switching core that sets of information associated with said first flow should traverse to arrive at said first egress device, said ingress device sending said first set of information to said first egress device via said first specific route, and further receives another set of information which is also associated with said first flow, and accesses said first flow data structure to obtain therefrom said indication of said first specific route, said ingress device sending said other set of information to said first egress device via said first specific route.

51. (Original) The router of claim 50, wherein said first flow data structure is not associated with any other flow.

52. (Cancelled)

53. (Currently amended) The router of claim 50, wherein said ingress device receives a second set of information associated with a second flow, and accesses a second flow data structure associated with said second flow, said second flow data structure comprising an indication of a second specific route through said switching core that sets of information associated with said second flow should traverse to arrive at said first egress device, said

ingress device sending said second set of information to said first egress device via said second specific route[;], and

wherein said first data flow structure and said second data flow structure are distinct.

54. (Currently amended) The router of claim 50, wherein said router further comprises a second egress device, wherein said switching core interconnects said ingress device with said second egress device to provide a plurality of possible routes between said ingress device and said second egress device, and wherein said ingress device receives a second set of information associated with a second flow, and accesses a second flow data structure associated with said second flow, said second flow data structure comprising an indication of a second specific route through said switching core that sets of information associated with said second flow should traverse to arrive at said second egress device, said ingress device sending said second set of information to said second egress device via said second specific route[;], and

wherein said first data flow structure and said second data flow structure are distinct.

55. (New) A router, comprising:

an ingress device;

a first egress device; and

a switching core interconnecting said ingress device with said first egress device to provide a plurality of possible routes between said ingress device and said first egress device,

wherein said ingress device receives a first set of information associated with a first flow, and accesses a first flow data structure associated with said first flow, said first flow data structure comprising an indication of a first specific route through said switching core that sets of information associated with said first

flow should traverse to arrive at said first egress device, said ingress device sending said first set of information to said first egress device via said first specific route,

wherein said ingress device receives a second set of information associated with a second flow, and accesses a second flow data structure associated with said second flow, said second flow data structure comprising an indication of a second specific route through said switching core that sets of information associated with said second flow should traverse to arrive at said first egress device, said ingress device sending said second set of information to said first egress device via said second specific route, and

wherein said first data flow structure and said second data flow structure are distinct.

56. (New) The router of claim 55, wherein said first flow data structure is not associated with any other flow.

57. (New) A router, comprising:

an ingress device;

a first egress device; and

a switching core interconnecting said ingress device with said first egress device to provide a plurality of possible routes between said ingress device and said first egress device,

wherein said ingress device receives a first set of information associated with a first flow, and accesses a first flow data structure associated with said first flow, said first flow data structure comprising an indication of a first specific route through said switching core that sets of information associated with said first

flow should traverse to arrive at said first egress device, said ingress device sending said first set of information to said first egress device via said first specific route,

wherein said router further comprises a second egress device, wherein said switching core interconnects said ingress device with said second egress device to provide a plurality of possible routes between said ingress device and said second egress device, and wherein said ingress device receives a second set of information associated with a second flow, and accesses a second flow data structure associated with said second flow, said second flow data structure comprising an indication of a second specific route through said switching core that sets of information associated with said second flow should traverse to arrive at said second egress device, said ingress device sending said second set of information to said second egress device via said second specific route, and

wherein said first data flow structure and said second data flow structure are distinct.

58. (New) The router of claim 57, wherein said first flow data structure is not associated with any other flow.